Chapter 11

HIV/AIDS

HIV (Human Immunodeficiency Virus) is the virus that leads to Acquired Immune Deficiency Syndrome (AIDS). It is also known as the "AIDS virus." Acquired Immune Deficiency Syndrome (AIDS) includes a variety of immune system effects subsequent to infection with the Human Immunodeficiency Virus (HIV). At the point of a diagnosis of AIDS, the immune system is already severely impaired. Death is the usual outcome of infection with HIV. The Centers for Disease Control and Prevention (CDC) estimates that 800,000 to 900,000 U.S. residents are living with HIV infection.

Approximately 40,000 new HIV infections occur each year in the United States; half are in people younger than 25 years of age. As of December 31, 2000, there were 448,060 deaths among people with AIDS that had been reported to the CDC.

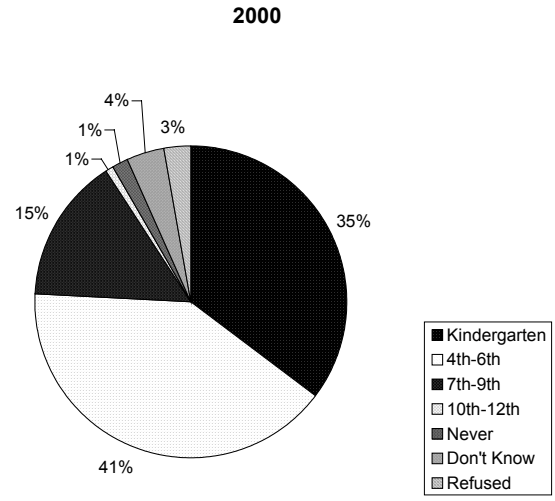
According to HHSS (Health and Human Service Surveillance) data, Nebraska's AIDS toll continues to grow, with 1,068 Nebraskans being diagnosed and reported with AIDS. More than half of these people have died.

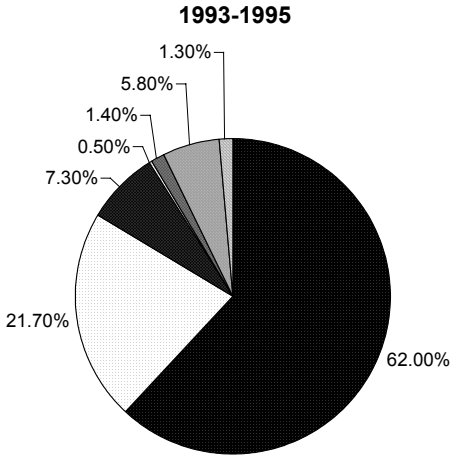
The BRFSS AIDS-related questions were not asked of respondents aged 65 and older. Respondents age 18 to age 64 were asked if they thought their chance of getting the AIDS virus was "high, medium, low, or none" (Table 7-1). Respondents were also asked if they had ever had their blood tested for HIV. Questions were asked to determine the grade at which children should be exposed to AIDS education and whether condom use should be encouraged in sexually active teenagers to reduce AIDS exposure.

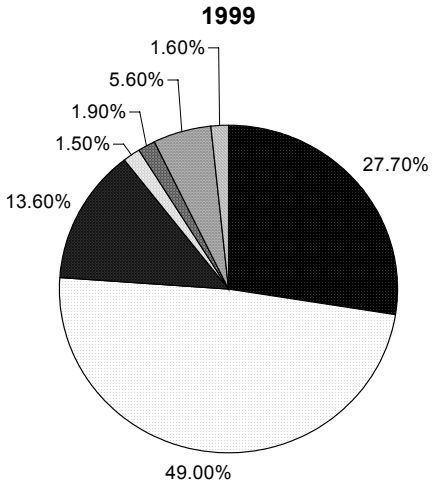
AIDS Education

When asked in which grade HIV/AIDS education should begin for a child in school, 75.7 percent (95% CI, 73.1% - 78.3%) of the respondents in 2000 felt it should begin at or below the 6^{th} grade level and 35 percent (95% CI, 32.1% - 37.9%) believed it should start in kindergarten. Only 1.9 percent (95% CI, 1.08% - 2.72%) believed that it should never occur, and 3.9 percent (95% CI, 2.8% - 5%) expressed that they are uncertain about the issue. The proportion of respondents who affirmed to start HIV/AIDS education at or below 6^{th} grade was 83.7 percent in 1993-1995, 81.4 percent in 1996-1998, and 76.7 percent in 1999. The data indicates a gradual decline in the opinion for that particular grade level. This decline, however, could be attributed to the simultaneous increase in the proportion of respondents who thought that it should begin at the 7^{th} to 12^{th} grade levels (Fig.83a).

Fig.83 a: AIDS Education







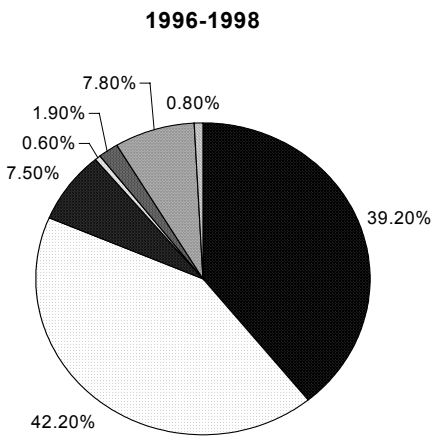
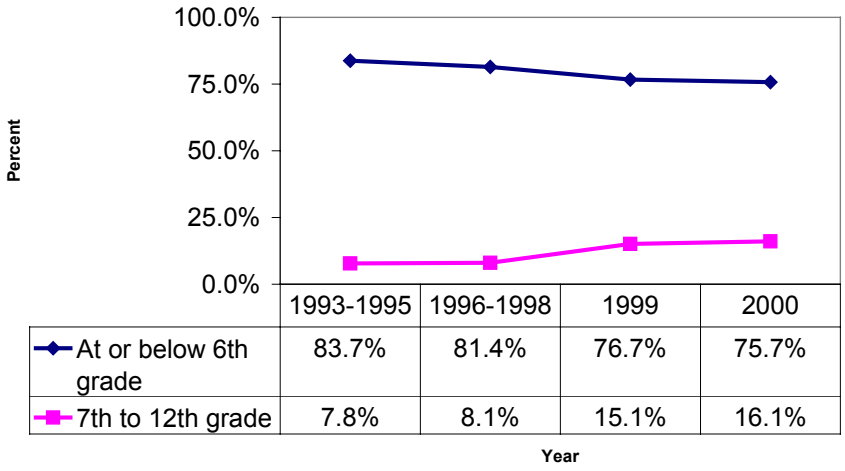


Fig.83b: AIDS Education (Changes in Opinion)



	1993-1995	1996-1998	1999	2000
At or below 6th grade	83.7%	81.4%	76.7%	75.7%
7th to 12th grade	7.8%	8.1%	15.1%	16.1%

Encourage condom use

About 84 percent (95% CI, 81.8% - 84.02%) of Lancaster County adults between the ages of 18 - 64 years reported that, if they had any sexually active teenage children, they would encourage them to use a condom. The proportion of adults who expressed this attitude remained about the same for last seven years with small fluctuations (Fig.84).

More women (85.1%) than men (82.9%) were in favor of encouraging condom use by their sexually active teenager. This response trend is also seen since the 1993-1995 period (Fig.85).

A greater number of the younger generation (89.2% of adults aged 18-24) than respondents of older generations (78% of adults aged 55-64) favored teen condom use.

Fig.84: Would Encourage Condom Use

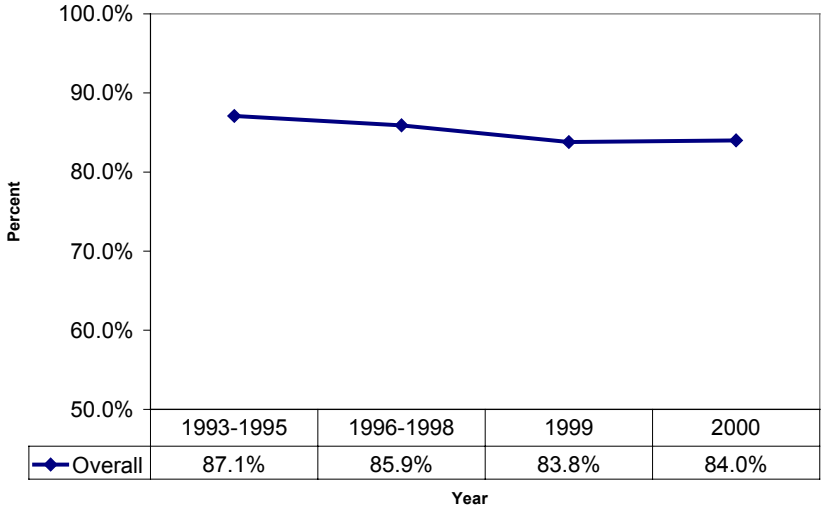
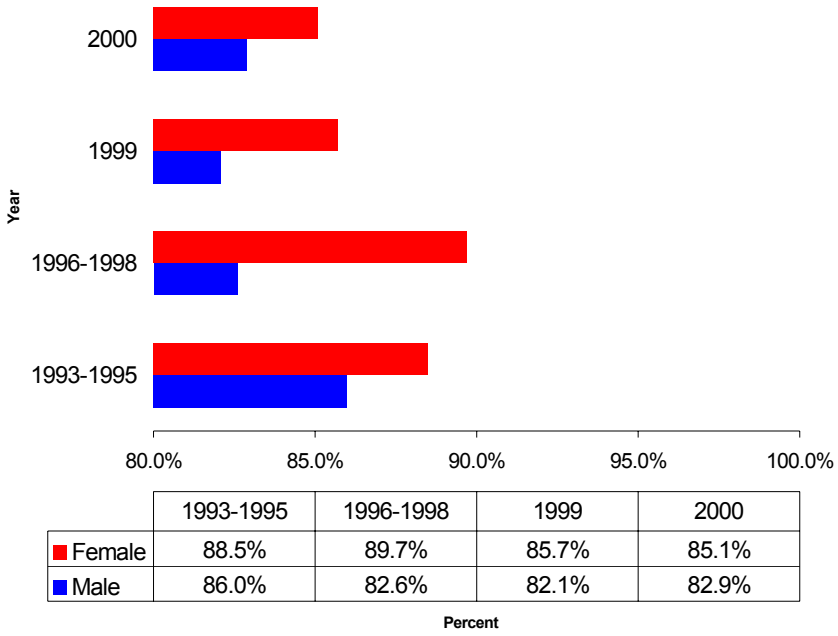
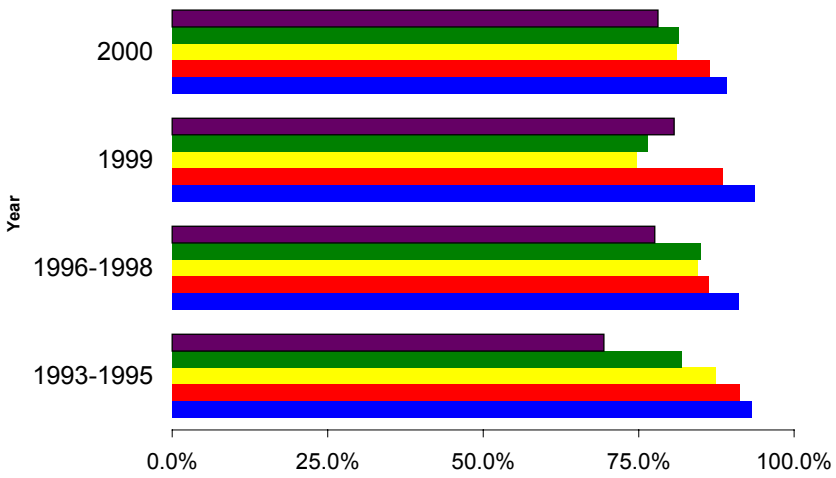


Fig.85: Would Encourage Condom Use by Gender



The proportion of adults aged, 18-24 years that support the teen use of condoms concept were 93.1 percent in 1993-1995, 87.7 percent in 1996-1995, and 93.7 percent in 1999. Support of teen condom use by adults age 55 to 64 years, was 69.4 percent in 1993-1995, 77.6 percent in 1996-1998, and 80.7 percent in 1999 (Fig.86).

Fig.86: Would Encourage Condom Use by Age Group

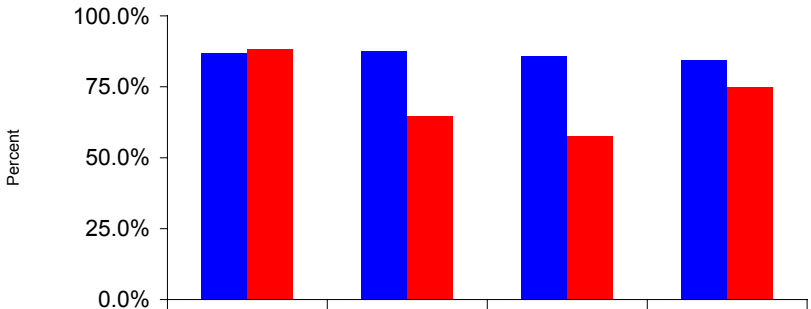


	1993-1995	1996-1998	1999	2000
55-64	69.4%	77.6%	80.7%	78.1%
45-54	82.0%	85.0%	76.4%	81.5%
35-44	87.3%	84.5%	74.7%	81.1%
25-34	91.3%	86.2%	88.5%	86.5%
18-24	93.1%	91.0%	93.7%	89.2%

Percent

Although more than one-third of the respondents among whites and non-whites stated that they would encourage their sexually active teenager to use a condom, whites (84.6%) were more in favor of such encouragement than non-whites (74.9%, Fig.87). No differences were seen across income or educational groups (Table 23).

Fig.87: Would Encourage Condom Use by Race



	1993-1995	1996-1998	1999	2000
White	87.0%	87.7%	85.7%	84.6%
Non-White	88.3%	64.8%	57.5%	74.9%

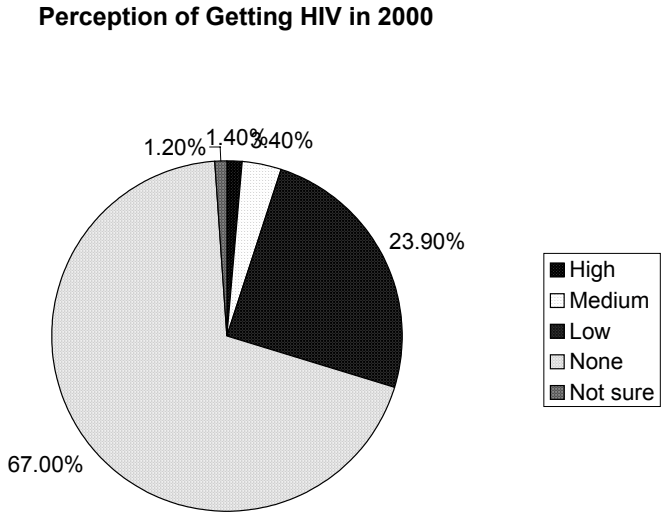
Year

Table 23: Would Encourage Condom Use				
Year	**1993-1995**	**1996-1998**	**1999**	**2000**
Highest Grade Completed				
Some HS or Less	88.6%	84%	81.8%	78.8%
HS Grade or GED	89.4%	90%	86.4%	86.3%
Some College	89.3%	85.3%	87.3%	83.6%
College Grade	83%	84%	78%	83.7%
Annual Household Income				
Less than $10,000	93.8%	95.3%	82.7%	83.8%
$10,000 - $15,000	89%	83.9%	93.8%	90.6%
$15,000 - $20,000	86%	90%	98.3%	80.8%
$20,000 - $25,000	96.5%	72.9%	83.2%	86%
$25,000 - $35,000	90.3%	87.8%	86.3%	84.7%
$35,000 - $50,000	83%	90%	80%	88.2%
$50,000+	86%	87.9%	83.6%	85%

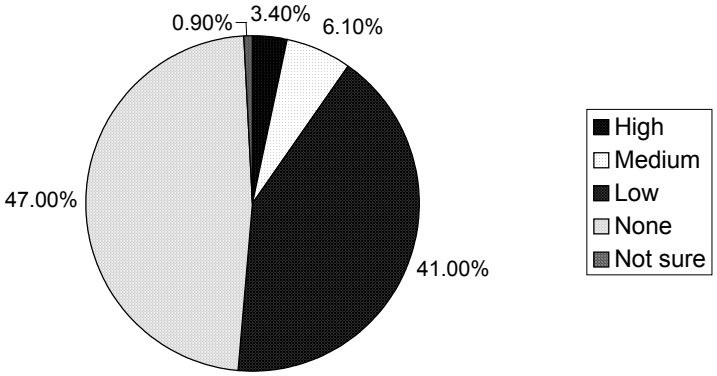
HIV Risk Perception

A person's perceived chance of contracting HIV (the AIDS virus) might be related to knowledge of transmission routes or understanding of the risk of exposure as it relates to behavior. Only 1.4 percent (95% CI, 0.70% - 2.1%) of respondents in the 2000 BRFSS survey felt that they were at high risk when asked about their perceived chances of getting infected with HIV. The majority of respondents (67%, 95% CI, 64.2% - 69.8%) felt they were not at risk of contracting HIV, and another 23.9 percent (95% CI, 21.3% - 26.5%) felt their chances were low (Fig.88a).

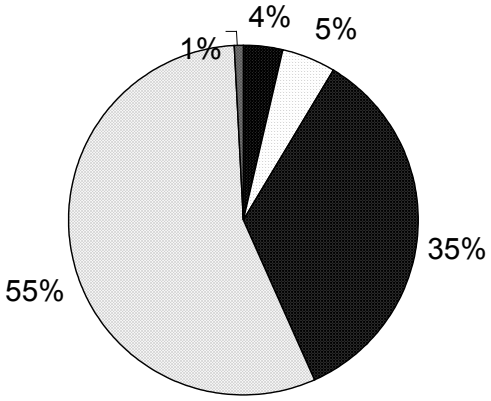
Fig 88a: Perception of Getting HIV

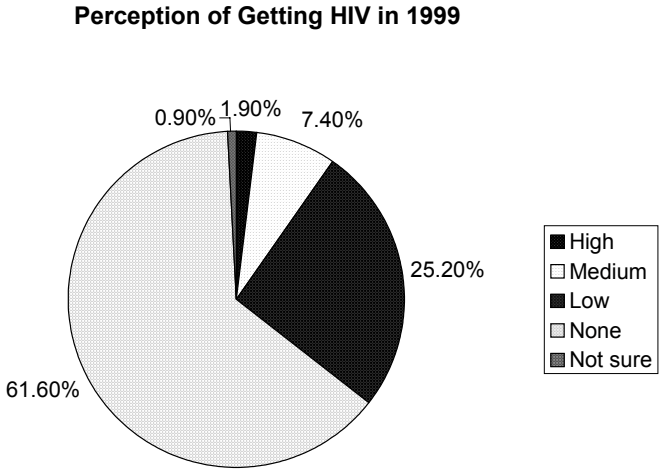


Perception of Getting HIV in 1993-1995



Perception of Getting HIV in 1996-1998

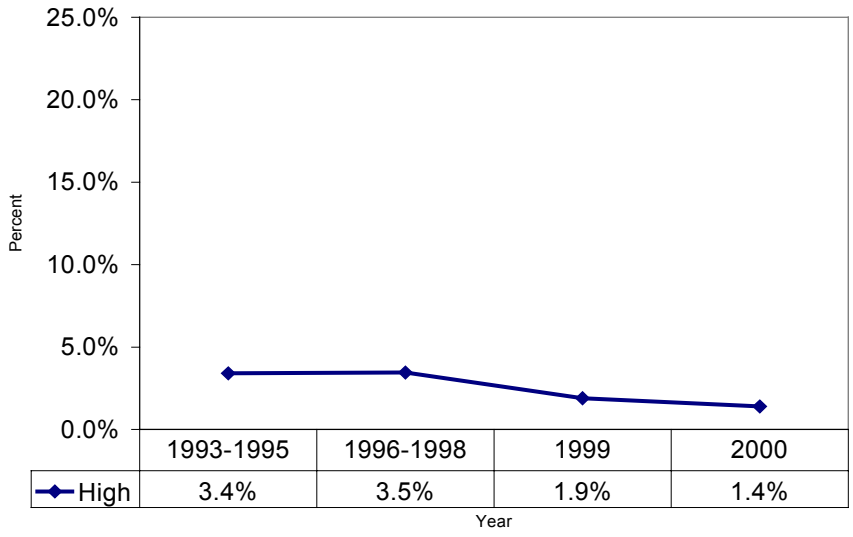




Prevalence and Trend

Figure 88b shows the trend in the respondents reporting a "High" risk of contracting HIV. Fewer adults aged 18-64 (1.4%) perceive themselves at risk today than seven years ago (3.4% in 1993-1995, Fig 88b).

Fig.88b: Trend in High Perception of Getting HIV

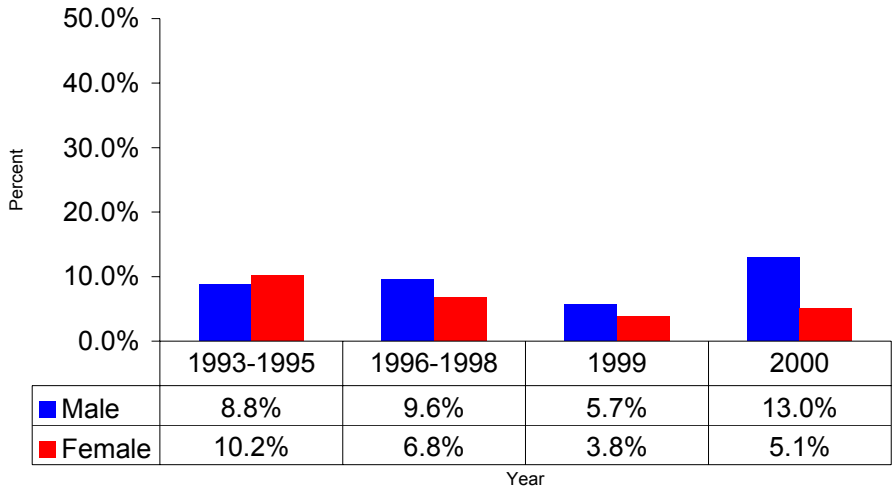


More younger than older adults considered themselves to be at high and medium risk when these risk categories were added together. Approximately ten percent of respondents aged 18-24 years reported their high or medium chance of getting HIV, compared to 1.7 percent of adults aged 55-64, a difference of about 8 percent. The difference in reported high and medium risk perception was even greater in the previous survey years (Table 24).

Table 24: Perception of High or Medium Chances of Getting HIV				
Year	**1993-1995**	**1996-1998**	**1999**	**2000**
Age group				
18-24	10.6%	14.7%	17.6%	9.6%
25-34	14.9%	7.3%	7.5%	3.6%
35-44	6.1%	3.7%	6.4%	4.2%
45-54	7.5%	9.3%	6.4%	2.8%
55-64	2.6%	5%	4.3%	1.7%

Males reported themselves to have a higher risk of contracting HIV than females. About 13 percent of male respondents said they were at high or medium risk of getting HIV compared to 5.1 percent of females (Fig.89).

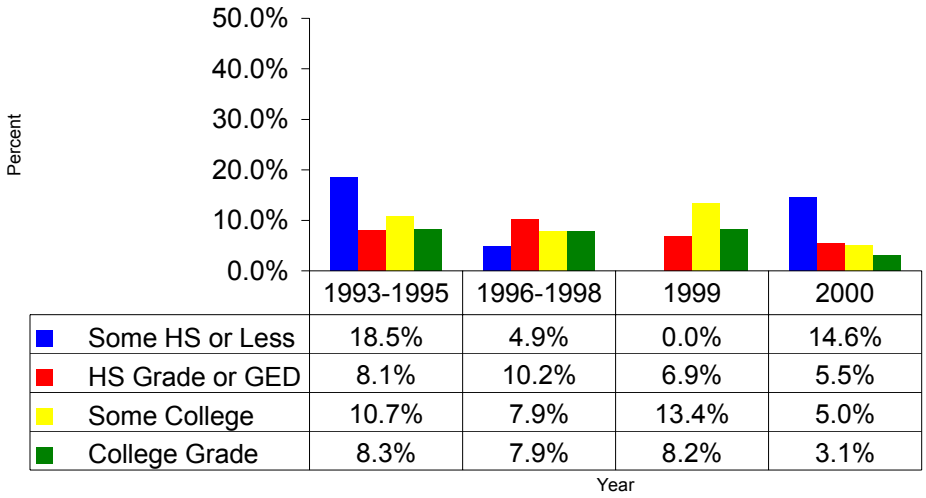
Fig.89: Trend in High or Medium Chances of Getting HIV by Gender



As education level increased, HIV risk perception decreased. Those with "some high school or less education" had a higher proportion (14.6%) of respondents reporting high or medium HIV risk compared to those with a college diploma (3.1%). The relationship between a respondent's education level and risk perception followed a similar pattern in the previous surveys, except in the 1999 period (Fig.90).

When HIV risk perception was considered in relation to race, whites showed higher odds of reporting HIV risk than non-whites in last two surveys (5% vs. 2.4% in 2000 and 17.6 % vs. 7.5% in 1999). However, the odds for the same two groups were lower in the 1993-1995 and 1996-1998 periods (Table 19). Considerable differences in perceived high or medium HIV risk between two extreme income groups (income less than $10,000 and $50,000) were observed in all but surveys conducted in 2000, where almost no difference between these two income groups was noted (Table 25).

Fig.90: High or Medium HIV Risk Perception by Education



	1993-1995	1996-1998	1999	2000
Some HS or Less	18.5%	4.9%	0.0%	14.6%
HS Grade or GED	8.1%	10.2%	6.9%	5.5%
Some College	10.7%	7.9%	13.4%	5.0%
College Grade	8.3%	7.9%	8.2%	3.1%

Table 25: Perception of High or Medium Chances of Getting HIV (Income and Race)

Year	**1993-1995**	**1996-1998**	**1999**	**2000**
Annual Household Income				
Less than $10,000	13.1%	13.1%	18.3%	8.3%
$10,000 - $15,000	10.7%	26.6%	2.1%	0%
$15,000 - $20,000	6%	8.3%	13.2%	5.7%
$20,000 - $25,000	20.4%	6.8%	15.7%	13.3%
$25,000 - $35,000	6.6%	7.5%	11.6%	1%
$35,000 - $50,000	60%	6.9%	15.8%	1.8%
$50,000+	6.5%	3.8%	8.9%	7.1%
Race				
White	8.9%	8%	17.6%	5%
Non-White	19.9%	14.4%	7.5%	2.4%

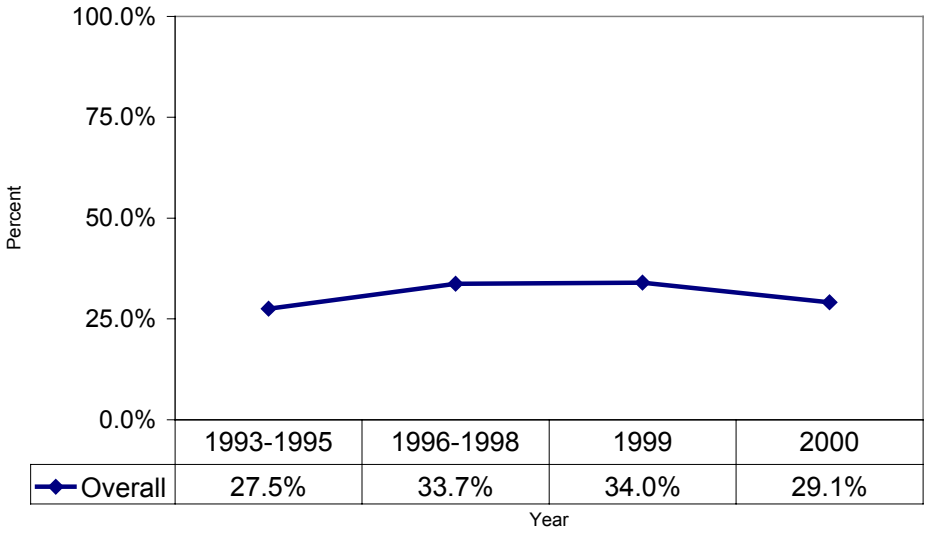
HIV Testing

Respondents were asked, aside from blood donations, if they had ever been tested for HIV. In 2000, approximately 29 percent (95% CI, 26.4% - 31.8%) of adults aged 18-64 in Lancaster County reported that they had been tested for HIV.

HIV Testing Trends

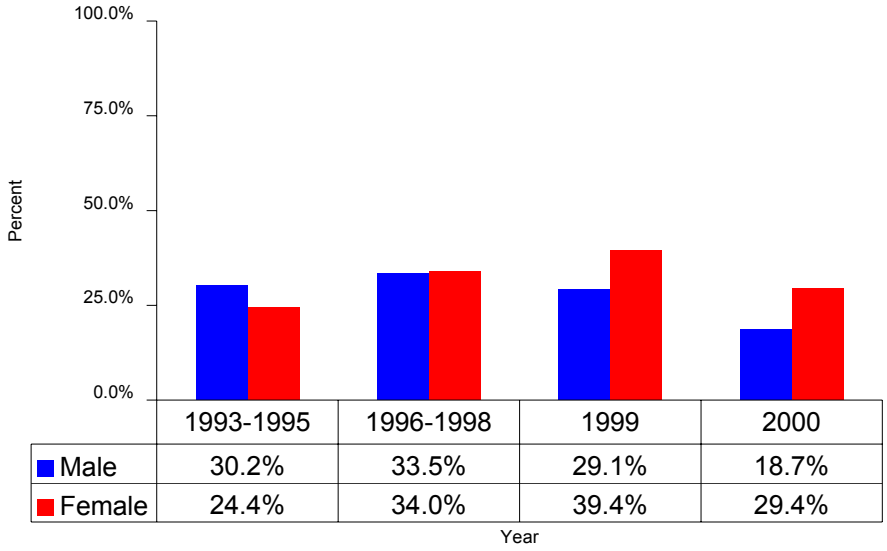
Overall HIV testing rates showed an inconsistent trend over the periods covered in this report (Fig.91).

Fig.91: Trend in Ever Had HIV Test



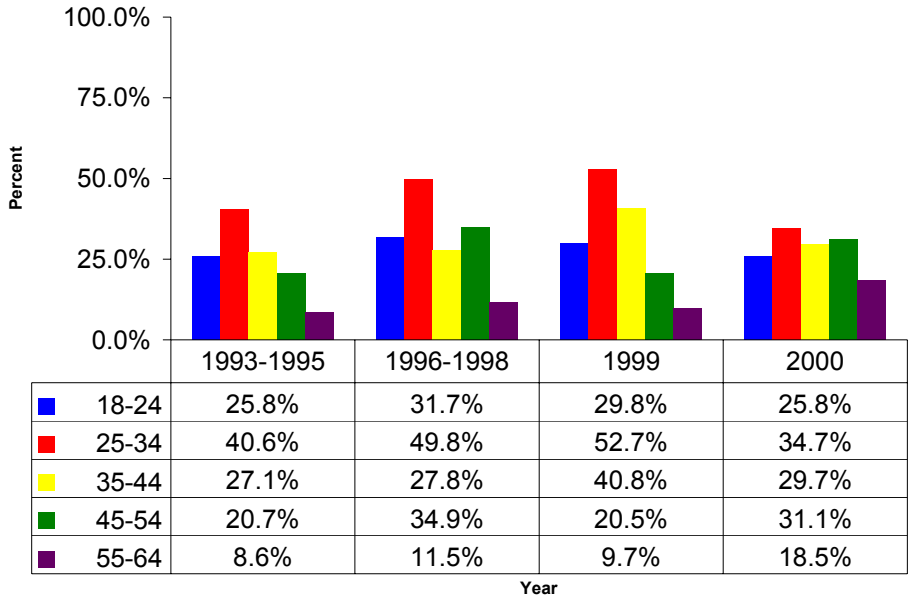
More women (29.4%) than men (18.7%) had higher rate for "ever having HIV test," this difference was not true, ", however, in 1993-1995 period, when a higher proportion of men than women had the test. No difference was observed between these two groups in the 1996-1998 period (Fig.92a).

Fig.92a: Trend in Ever Had HIV Test by Gender



Adults aged 25-34 had the highest proportion of respondents receiving an HIV test (34%) followed by those aged 45-54 years (31.1%) and those aged-35–44 years (29.7%). The proportion of adults that had been tested for HIV was considerably lower among respondents aged 55–64 years, irrespective of survey years (Fig.92b). No trends were evident by income, race, or education level (Table 26).

Fig 92b: Trend in Ever Had HIV Test by Age



	1993-1995	1996-1998	1999	2000
18-24	25.8%	31.7%	29.8%	25.8%
25-34	40.6%	49.8%	52.7%	34.7%
35-44	27.1%	27.8%	40.8%	29.7%
45-54	20.7%	34.9%	20.5%	31.1%
55-64	8.6%	11.5%	9.7%	18.5%

Table 26: Ever Had HIV Test

Year	**1993-1995**	**1996-1998**	**1999**	**2000**
Some HS or Less	16.6%	17%	38.4%	38.2%
HS Grad or GED	28.3%	28.8%	28.6%	19.3%
Some College	25.8%	34.3%	35.9%	31.7%
College Grad	30%	38.8%	35.3%	36.5%
Annual Household Income				
Less than $10,000	19.2%	40.1%	28.3%	33.1%
$10,000 - $15,000	35.9%	31.9%	56.8%	36.1%
$15,000 - $20,000	25.3%	37.8%	31.8%	30.5%
$20,000 - $25,000	40.2%	29.2%	27.8%	40.6%
$25,000 - $35,000	26.9%	35.6%	42%	33.2%
$35,000 - $50,000	24.2%	38.3%	27.5%	31.5%
$50,000+	28.2%	36.6%	36%	28.9%
Race				
White	27.3%	34%	33%	28%
Non-White	34.2%	32.9%	44.9%	41.9%

Table 27a and 27b depict the survey participants' main reasons and test locations for their most recent HIV blood tests. The most frequently cited category in the 2000 period was respondents' own curiosity (23.8%) followed by a routine check-up (13.6%). The proportion of respondents who went for a HIV test due to their own curiosity was 11.8 percent in 1993-1995, 14.59 percent in 1996-1998,and 16.8 percent in 1999.

The most commonly reported site for HIV testing was at private doctor or HMO with 43.6 percent of responses in 2000. In the 2000 period, the next most common responses included those that received their HIV test at the hospital, the emergency room, and at an outpatient clinic (13.9%). However, for the periods of 1993-1995 and 1999 the most common testing sites were the blood bank, plasma center, and Red Cross.

Table 27 a: Main Reason for Most Recent HIV Blood Test

Year	**1993-1995**	**1996-1998**	**199**	**2000**
Hospitalization/Surgical Procedure	1.9%	2%	3.1%	6.4%
To apply for Health Insurance	4.2%	2.7%	4.2%	3.4%
To apply for Life Insurance	5.4%	8.5%	11.6%	6.6%
For Employment	3.9%	7.4%	2.1%	3%
To apply for a Marriage license	1.1%	1.1%	0.7%	0.6%
For Military service	4.9%	6%	8.8%	6.8%
For Immigration	0%	0.8%	0%	2.9%
Just to find out You are Infected	11.8%	14.6%	16.8%	23.8%
Because of referral by a Doctor	0	0	0	0
Because of pregnancy	N/A*	7.8%	23.5%	9.9%
Referred by your sex partner	0	0.5%	0%	0.6%
Part of a blood donation process	16.6%	17.1%	3.3%	2.2%
Routine check-up	5.3%	14.1%	12.5%	13.6%
Occupational exposure	5.7%	5.4%	0.4%	4.9%
Because of illness	2.7%	1.8%	0.9%	1.8%
At risk of HIV	N/A	0%	3.8%	5.6%
Other	5.6%	6.3%	5.6%	6.9%
Don't know	1.9%	1.9%	2.3%	1.1%
Refused	0%	1.8%	0.5%	0%

** Was not asked*

Table 27b:Site of Most Recent HIV Blood Test				
Year	**1993-1995**	**1996-1998**	**199**	**2000**
Private Doctor, HMO	16.5%	34.1%	43.3%	43.6%
Blood bank, plasma center, red cross	17.6%	0.7%	11.4%	0.6%
Health Department	10.2%	6.1%	2%	4.3%
AIDS clinic, counseling, testing site	2.1%	4.6 %	5.2%	1.3%
Hospital, emergency room, outpatient clinic	10.5%	16.8%	3.3%	13.9%
Family planning clinic	6.9%	1.1%	1.3%	0.6%
Prenatal clinic, obstetrician's office	1.5%	0%	0%	2.4%
TB clinic	3.5%	0%	0%	0%
STD clinic	0.3%	0%	3.2%	0%
Community health clinic	0.7%	2.1%	1.2%	1.2%
Clinic run by employer	2.7%	6.4%	2.1%	6.8%
Insurance company clinic	4.6%	3.2%	0.8%	1.8%
Other Public clinic	3.5%	3.7%	1%	5.4%
Drug treatment facility	1.1%	0%	7.7%	0.6%
Military service	4.1%	6.6%	0%	5.3%
Immigration site	3.6%	0%	3.6%	0.5%
At home, Home visit by Nurse or Health worker	N/A*	6.2%	6.6%	4.8%
At home using self sampling kit	N/A	0.8%	0%	1.4%
In jail or prison	N/A	0.3%	0%	0%
Other Public clinic	N/A	0%	4.6%	4.9%
Don’t know	3.8%	1%	1.4%	1.1%
Refused	0%	1.1%	1.4%	0%

** Was not asked*